

NOVEL METHODS OF CONSTRUCTING LIBRARIES OF GENETIC PACKAGES THAT COLLECTIVELY DISPLAY THE MEMBERS OF A DIVERSE FAMILY OF PEPTIDES, POLYPEPTIDES OR PROTEINS

The present invention relates to constructing
5 libraries of genetic packages that display a member of
a diverse family of peptides, polypeptides or proteins
and collectively display at least a portion of the
diversity of the family. In a preferred embodiment,
the displayed polypeptides are human Fabs.

10 More specifically, the invention is directed
to the methods of cleaving single-stranded nucleic
acids at chosen locations, the cleaved nucleic acids
encoding, at least in part, the peptides, polypeptides
or proteins displayed on the genetic packages of the
15 libraries of the invention. In a preferred embodiment,
the genetic packages are filamentous phage or
phagemids.

The present invention further relates to
methods of screening the libraries of genetic packages
20 that display useful peptides, polypeptides and proteins
and to the peptides, polypeptides and proteins
identified by such screening.